A new method for delivering stem cells to damaged heart muscle has shown early promise in treating severe heart failure, researchers report online July 27 in Stem Cells Translational Medicine.

Amit Patel, M.D., director of cardiovascular regenerative medicine at the University of Utah in Salt Lake City, and colleagues recruited 60 patients with severe heart failure. They randomly assigned 48 to receive stem cell therapy along with their usual care, and 12 to stay with standard care only.

The stem cell therapy appeared safe, with no adverse effects linked to the treatment itself, the researchers note. And after one year, the patients
showed a modest improvement in ejection fraction. It's not clear yet whether those improvements could be meaningful, Patel told HealthDay. He added that larger clinical trials are underway to see whether the approach could be an option for advanced heart failure.

Patel's team used a novel technique to deliver stem cells to the heart. They took stem cells from patients' bone marrow and infused them into the heart through the coronary sinus. "Most other techniques have infused stem cells through the arteries," Patel explained. One obstacle, he said, is that people with heart failure generally have hardened, narrowed coronary arteries, and the infused stem cells "don't always go to where they should."

More information: Abstract
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